a cheap edition of these books, and sold 10,000 copies within one year. Popular text-books seem to have the largest sales; and Polubojarinow, the publisher, paid to the author of a series of arithmetics, Mr. Jewtushewskij, the sum of 50,000 rubles. From the foregoing it will appear that the notion that Russian literature is made up solely or largely of those writers whose works have thus far been translated into English — Turguenieff, Tolstoï, Dostoyevsky, and Gogol — is fallacious. As a writer in the *Christian Union* recently pointed out, it would be as just to England and America to translate Dickens, Hawthorne, and Haggard into some foreign tongue, and represent them as English literature, as it is to Russian literature to be judged by the writings of the authors now known to us through English translations. "Nothing could be more unfounded or contrary to the fact than the impression which is abroad that we have in these translations a fair presentment of Russian literature. In reality, we who only read English — and even those of us who know French and German — have gained no more of that literature than the faintest glimpse. With very few exceptions, the books that have been Englished are all novels: they are all novels of the modern period, but they do not do the smallest justice to the novelists of that period. We rave about Turguenieff and Tolstoï, but what of Gontcharov, Pisemsky, and Pomyalóvsky, and half a dozen others equally or unequally noteworthy, about whom never a word is said? And then what have the Russian poets, the Russian essayists, the Russian historians, the Russian scientists, done, that we should be kept in the most Cimmerian darkness as to them and their works? By what strange caprice of translator or publisher or public is it that to Anglo-Saxon readers Pushkin, Lérmontov, Griboyédov, Kylov, Bielínsky, Káramsin, Bestyuzhev-Ryúmin, Solóviev, Písarev, Dobrolyúbov, and so many others, remain practically unknown? All the more is there reason to wonder at and deplore this neglect when it is remembered that in ignoring writers like these we are taking special pains, as it were, to hold unliquidated our manifest duty to a great race."

ELECTRICAL NEWS.

NEW INSULATING MATERIAL. — A recent German patent for a new insulating material for electric conductors specifies the use of paper which has been thoroughly soaked in an ammoniacal copper solution. The pasty mass is then pressed against the conducting wires to be covered by means of rollers, and the whole is finally submitted to strong pressure. When dry, the covered wire is passed through a bath of boiling linseed-oil, being left in it until the covering is saturated. This makes it elastic and impermeable to moisture. The covering is said to be durable, and efficient as a non-conductor.

LEAD-COVERED CABLES. — It has been accepted as an acknowledged fact that lead-covered cables, when placed under ground in creosoted wooden troughs, undergo a rapid deterioration of the lead sheathing, owing to the metal being converted into a carbonate; but closer research tends to show that this destruction need not necessarily take place. Close observation of creosoted conduits and lead-covered cables, laid at various times since 1884, apparently prove, according to the London *Electrical Review*, that the destructive agent usually present in freshly creosoted wood disappears almost entirely after a few years. A cable was laid upwards of two years ago in a conduit constructed in 1884, and at this date there is but very slight trace of action on its surface, while part of the same cable laid in an 1888 conduit shows considerable scale of carbonate of lead after one year's exposure. Parts of the same cable placed in other conduits about a year after their construction show but little damage. One cable laid in 1885 is only slightly affected, and it is not anticipated that any further deterioration will take place. Some experiments to test the effect of time and ventilation on creosoted wood were carried out by placing cables covered with an alloy of tin and lead in boxes made of creosoted wood, one box made of wood creosoted more than two years back, and another more recently impregnated. These boxes were sealed up, and opened after a lapse of three months. The samples in the old wood box were barely touched, while the samples in the newer one were thickly covered on the sides and top with what is chemically known as phenolate. Either phenol, a volatile gas, or acetic acid in combination with carbonic-acid gas, will attack lead and reduce it to a carbonate. If no acetic acid is present in the wood, and the phenol be evaporated by some means or another, there should be no more damage done to lead cables in creosoted troughs than if they were run in conduits of other materials; but means should be taken to freely ventilate the troughs, not only to protect the cables, but also to guard against accumulations of explosive gas. Under these conditions, plain lead sheathing would prove as efficient as that made of the tin alloy, the durability of which latter covering can hardly be accepted as assured.

LIGHTNING ON WAR-VESSELS. — Apart from the modern vessels being protected by their construction, or by special provisions for the purpose, the London *Electrical Review* asserts that lightning does not play as destructive a part as it did forty or fifty years ago, as even those ships unprovided with conductors have suffered less damage than a smaller number of ships experienced formerly; not that modern vessels are exempt, but they seem to be struck in a manner which causes fewer fatal accidents, and in some cases even the effects of a lightning-flash have borne so little trace of their origin that they have been credited to the wilful act of some one on board.

HEALTH MATTERS.

The Pathological Bearings of Heredity.

ANIMALS, including man, have arrived at their present state of development by the combined but rival forces of heredity and evolution, the latter term including the effects of surrounding environment. Evolution without heredity, as Ribot observes, would render every change transitory; and every modification, whether beneficial or not, would disappear with the individual. The results of heredity without evolution, on the other hand, would give us the monotonous conservation of the same types fixed once and for all. With heredity and evolution we have life and variation. Evolution produces physiological and psychological modifications, habit fixes these in the individual, and heredity fixes them in the race. These aphorisms, says *The Medical Press*, apply as well to diseased conditions as to health, and, in endeavoring to unravel the mysterious bearings of heredity upon disease, we have to bear in mind the conflicting influence of stability with this tendency to variation. The operation of hereditary tendencies is perpetually disturbed by innumerable circumstances unappreciable by our means of observation, but capable nevertheless of producing varieties infinite alike in extent and degree.

It is well known that sensitiveness, whether to general or special impressions, varies extremely in different individuals. An operation which involves pain amounting to agony to one person will be borne by another with comparative indifference; and the tissues of one person will re-act to stimuli to such an extent as to cause violent inflammation, while those of another prove quite passive under similar circumstances. It is this varying irritability which explains the fact that no two cases are exactly alike of the same disease. These differences are distinctly transmissible from parent to offspring; and, when the inherited quality is a tendency on the part of certain tissues to re-act more readily than normal to morbid influences, we say that a person has a diathesis. What we term, for the want of a better word, idiosyncrasy, is in reality a diathesis or part of a diathesis, — a peculiar susceptibility of the individual to re-act unduly, either in excess or otherwise, to certain stimuli. Idiosyncrasies may be transmitted, as they very frequently are; but they are in any case congenital. These peculiarities of tissue and function often remain latent until some morbid process emphasizes the fact that a particular proclivity exists in the individual. This point cannot be better illustrated than by quoting the well-known story, that, of several hunters who were thrown at the same time into the same stream of water, no two were affected alike. In one an attack of rheumatism marks the tendency of joint-tissues to take on a certain process of inflammation, in another an attack of inflammation of the lungs points out the pulmonary apparatus as the organ least endowed with powers of resistance, while a third